

U.S. Department of Energy Sustainability Performance Office DOE Sustainability SPOTlight

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SUSTAINABILITY NEWS


Assisting Federal Facilities with Energy Conservation Technologies (AFFECT)

DOE's Federal Energy Management Program (FEMP) recently issued a notice of intent to release a Funding Opportunity Announcement (FOA) for its new AFFECT program. The program intends to provide direct funding awards of up to \$1 million per project to help finance renewable energy and combined heat and power (CHP) projects. Projects that apply for the funding are expected to leverage other financing mechanisms (such as agency funding, Energy Savings Performance Contracts, or Utility Energy Service Contracts) and should provide significant replication potential at other Federal facilities.

The FOA is expected to be released in the first quarter of FY 2014. FEMP will provide technical assistance for projects before and after the FOA is released. For more information on the program and how to apply for technical assistance, visit: <http://go.usa.gov/jyUF>.

Updated Biobased Procurement Reporting


The Federal Acquisition Regulation (FAR) Council recently published a revision to FAR clause 52.223-2, *Affirmative Procurement of Biobased Products Under Service and Construction Contracts*. Services and construction contractors are now required to report annual biobased reports to a new website (<http://www.sam.gov>). Additional details for DOE reporting will be forthcoming.

To view the Federal Register notice, visit:  <http://go.usa.gov/jyP3>.

CEQ Issues Water Implementing Instructions

The White House Council on Environmental Quality (CEQ) recently issued *Implementing Instructions: Federal Agency Implementation of Water Efficiency and Management Provisions of EO 13514*, which clarifies reporting requirements related to the water intensity and industrial, landscaping, and agricultural (ILA) water reduction goals. The document also expands upon requirements to promote water reuse and stormwater management best practices.

Any changes in DOE data reporting required in response to these Implementing Instructions will be communicated through the forthcoming *Guidance for FY 2014 DOE Site Sustainability Plans*, which will be distributed in August 2013.

To view the *Implementing Instructions* document, visit:  <http://go.usa.gov/jyPT>.

Updated ASHRAE Standard Requirement Released

On July 9, FEMP published a new rule requiring new Federal buildings to meet higher energy efficiency standards. The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 90.1 is still utilized, but has been updated from the 2007 to the 2010 version. DOE estimates the 2010 standard will save approximately 18 percent more energy in commercial buildings compared to the 2007 standard. For more information and the link to the Federal Register notice, visit: <http://go.usa.gov/jyEY>.

Energy Sector Climate Vulnerabilities Report Released

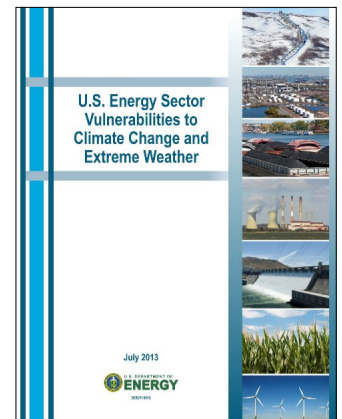
DOE recently published a new report titled, *U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather*, outlining potential effects that climate change will have on energy production, electricity generation, and utility demand. Sites which operate energy generation and/or transmission equipment are encouraged to view the report to learn about the potential effects that climate change may have at their facilities. To learn more, visit: <http://go.usa.gov/jyPJ>.

SUSTAINABILITY SUPERSTAR



Craig Zamuda is a Senior Policy Advisor in the Office of Climate Change Policy and Technology. He is being recognized for his tireless efforts as the lead author of the *U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather* report which was publicly released in July. Check out the feature article below for additional information on this report!

Send us your champion!



UPCOMING EVENTS AND MILESTONES



(Click to view SPO Calendar) ↑

Courses, Webinars, and Events

Aug 7: [Car Sharing to Reduce the Federal Fleet Webinar](#)

Aug 13-15: [Just-In-Time ESPC Webinar Series](#)

Mid August: SSP Guidance Issued

Aug 27: [Introduction to UESC Webinar](#)

ON-DEMAND TRAINING

Certifications

[GSA-Sponsored LEED Training Certification for Federal Employees](#)

Financing

[ESPCs for Small Sites](#)

[UESCs and Energy Project Funds](#)

Buildings

[Commissioning for Federal Facilities](#)

[Operations, Maintenance, and Commissioning](#)

[Implementing Deep Retrofits](#)

Water

[Water Efficiency Planning and Implementation](#)

Data Centers

[Data Center Efficiency with ASHRAE Thermal Guidelines](#)

[Labs, Data Centers and High-Tech Facilities](#)

Greenhouse Gas Reporting

[Federal GHG Accounting and Reporting](#)

Sustainable Acquisition

[Energy-Efficient Product Procurement](#)

SUCCESS STORIES

LANL Building Retrofits Save Energy

LANL recently implemented a series of conventional and unconventional measures at its National Security Sciences Building (NSSB) to save energy. Built in 2006, the 275,000 square-foot NSSB houses 700 staff members, and includes a 600-seat auditorium and lecture hall. Despite the relatively young age of the facility, LANL implemented energy conservation measures, primarily focused on the HVAC system, which have resulted in energy savings of 13 percent. The measures include night setbacks, narrower thermostat ranges, and optimized air temperature and pressure conditions to meet building needs. In addition to the primary energy savings, the improvements have resulted in more comfortable conditions, lessening the need for individual space heaters or fans.



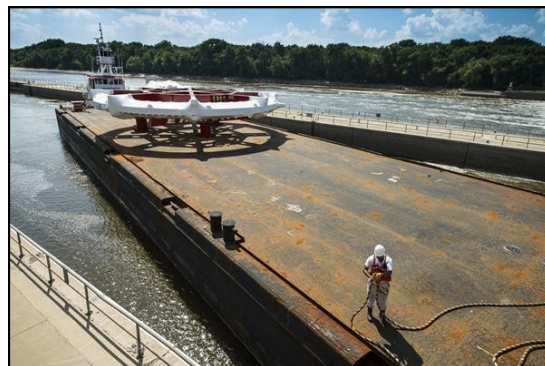
The Sustainability Program at LANL also implemented a system that allows the NSSB building automation system to work together with a nearby 1 MW photovoltaic (PV) array. If power generation at the PV array is reduced due to cloud cover, the building can respond by temporarily reducing energy consumption at the NSSB by reducing HVAC output. During the peak cooling season, this demand response resource can provide up to 150 kilowatts of generation-following capability, and can be sustained for approximately 30 minutes without affecting building comfort levels. LANL is currently working to network a series of buildings with this scheme to provide enough demand response to match the full output of the 1 MW PV array.

For more information on LANL's efforts, contact Monica Witt (mwitt@lanl.gov).

Muon g-2 Move Successful

The electromagnet from the Muon g-2 (gee minus two) experiment at Brookhaven National Laboratory recently made a one-month long, 3,200 mile trip from Long Island to the Fermilab in Illinois. The experiment is being relocated to Fermi because it allows for the generation of a more pure and intense beam of muons, a subatomic particle which exists for just 2.2 millionths of a second. The improved muon generation will allow greater experimental knowledge about the properties of the particle. The magnet from BNL serves as a storage ring for the generated muons.

While much of the magnet could be disassembled, the 50 foot wide and 50 ton superconducting coil was transported in a single piece. In addition to complications due to the size of the magnet, the sensitive ring could be damaged if it flexed just one tenth of an inch. The bulk of the trip was performed on a specialty barge which traveled around Florida and up the Mississippi River. The land-based legs of the trip were made on a truck traveling only at night, at a top speed of 10 mph.



Despite the complex transportation operation, it is estimated that moving the magnet will cost about 10 times less than building a new one, resulting in significant cost savings for the Department. This once again shows how DOE sites collaborate in unique ways to reutilize existing assets to save money and reduce waste.

For more information, visit: <http://muon-g-2.fnal.gov/bigmove/>.



Check out CEQ's latest GreenGov Leader newsletter: <http://go.usa.gov/g8yT>



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